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Claims

1. Graphical user interface for indication of a malfunction state of a printing or copying system,

    with at least one display field (14, 16, 54, 56) for malfunction indication, whereby the display field is essentially shown in a first color given an undisturbed first operating state,

    the display field (14, 54) is essentially shown in a second color given a potentially disturbed second operating state with a potential malfunction of a first group,

    and whereby the display field (16, 56) is essentially shown in a third color given a disturbed third operating state with a malfunction of a second group.

2. User interface according to claim 1, characterized in that the first color is a low-contrast color relative to the surroundings of the display field.

3. User interface according to one of the previously cited claims, characterized in that the second color is a color that is clearly distinguishable from the surroundings of the display field (14, 54), in particular the color yellow, whereby a warning message is output in the second operating state.

4. User interface according to any of the previously cited claims, characterized in that the third color is a color that is clearly distinguishable for [sic] the surroundings of the display field (16, 56), in particular the color red, whereby a malfunction message is output in the third operating state.

5.   User interface according to any of the preceding claims, characterized in that the first group comprises potential malfunctions in which a warning message and/or alarm message is output via the color of the display field, whereby no actual impairment of the printing or copying process is present given malfunctions of the first group.

6.   User interface according to any of the preceding claims, characterized in that the second group comprises malfunctions in which an error state exists due to which a severe impairment of the printing or copying system exists and/or the printing or copying process is interrupted.

7.   User interface according to any of the preceding claims, characterized in that the display field (14, 16, 54, 56) contains a graphical symbol.

8.   User interface according to claim 7, characterized in that the symbol is at least changed given a change from the second operating state to the third operating state.

9.   Graphical user interface for display of a malfunction state of a printing or copying system,

with at least one first display field (14, 56) and a second display field (16, 56),

whereby the first display field (14, 54) and the second display field (16, 56) are essentially shown in a first color given an undisturbed first operating state,

the first display field is essentially shown in a second color and the second display field is essentially shown in the first color given a potentially

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disturbed second operating state with a potential malfunction of a first group first operating state,

and whereby the second display field (16, 56) is shown in a third color given a disturbed third operating state with a malfunction of a second group.

10. Method for display of a malfunction state of a printing or copying system,

in which the display field (14, 16, 54, 56) is essentially shown in a first color in an undisturbed first operating state,

the display field (14, 16, 54, 56) is essentially shown in a second color in a potentially disturbed second operating state with a potential malfunction of a first group,

and in which the display field (14, 16, 54, 56) is essentially shown in a third color given a disturbed third operating state with a malfunction of a second group.

11. Graphical user interface for support in the remedy of an error state of an electrophotographic printing or copying system,

with at least one first graphical representation of at least one first view of the printing or copying system, characterized in that in this graphical representation the region (24, 58) is specified in which an error has occurred,

with at least one second graphical representation of at least one part of the first representation in which the error location is shown enlarged or

enlarged and in more detail in contrast to the first graphical representation of the region in which the error has occurred,

whereby the activation of the enlarging function occurs via an input with the aid of a computer mouse or a touch-sensitive screen

12. User interface according to claim 11, characterized in that at least the second graphical representation contains an indication of the accessibility of the error location (24, 58).

13. User interface according to claim 11 or 12, characterized in that the first and/or second representation is a three-dimensional representation.

14. User interface according to any of the claims 11 through 13, characterized in that the first and/or second view is contained in an image series of an animated graphic or a film sequence.

15. User interface according to any of the claims 11 through 14, characterized in that the second graphical representation can be generated from the first graphical representation with the aid of an enlarging function.

16. User interface according to any of the claims 11 through 15, characterized in that, in addition to the first and/or second graphical representation, the graphical user interface contains text via which an operating personnel receives an indication of the accessibility of the error location and/or of the error cause.

17. User interface according to any of the claims 11 through 16, characterized in that the first and/or second graphical representation contains at least one region of the housing side (24) of the printing or copying system from which an access to the error location is possible.

18. Method for support in the remedy of an error state of an printing or copying system,

5   in which, given an error state, at least one first graphical representation of at least one view of the printing or copying system is output, characterized in that, in this first graphical representation the region (24, 58) of the printing or copying system in which the error state has occurred is specified,

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and in which at least one second graphical representation is subsequently output, via which at least enlarged representation or an enlarged and more detailed representation is output of the region in which the error has occurred,

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whereby the enlarging function is activated via an input with the aid of a computer mouse or a touch-sensitive screen.

19. System for automatic generation of messages in an electrophotographic
20   printer or copier,

with a data processing system that generates at least one first text message that contains at least one error code given the occurrence of an error state,

25   and which transmits the message to at least one preset recipient.

20. System according to claim 19, characterized in that a preset event occurs when a preset minimum quantity of consumable material is reached, the [sic] a preset wear limit of an expendable part is reached and/or an error
30   state of the electrophotographic printing or copying system occurs.

21. System according to claim 19 or 20, characterized in that a transfer of the message occurs with the aid of an e-mail.

22. System according to claim 19 or 20, characterized in that a transfer of the message occurs with the aid of an SMS message.

23. System according to any of the claims 19 through 22, characterized in that the message is automatically generated, whereby the sending of the message occurs via an input via an operating unit of the electrophotographic printer or copier.

24. System according to any of the claims 19 through 23, characterized in that the message contains further specifications and/or current setting values of the printer or copier that are necessary to determine the error cause.

25. System according to any of the claims 19 through 24, characterized in that the message to be transmitted to an operating unit of the printer or copier can be displayed.

26. System according to any of the claims 19 through 25, characterized in that the message contains at least the serial number, the error code and at least the counter state of the printer or copier.

27. System according to any of the claims 19 through 26, characterized in that in the system an error code is associated with each of a plurality of possible error states, and that the occurred error state can be identified with the aid of the transferred error code.

28. Method for automatic generation of messages in an electrophotographic printer or copier,

in which a text message that contains at least an error code is automatically generated with the aid of a data processing system after the occurrence of a preset error state,

5   and in which the message is sent to a preset recipient.